

The major issues in the Retention debate

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The meta-analysis research on retention shows systematically negative findings.

Holmes (1989; see also Holmes & Matthews, 1984), using the powerful meta-analysis procedures, synthesized the results from 63 studies on the effects of retention. These studies produced 861 effect-sizes, with an overall effect of $-.15$ (the effect-size was $-.26$ when weighted by study rather than individual effects). That is, the groups of non-promoted/retained students scored $.15$ to $.26$ standard deviation units lower than the promoted comparison groups on the various outcome measures.

The overall effects from retention are among the lowest of all educational innovations.

This effect-size is among the very lowest of many possible innovations. In prior research I have synthesized the results of over 300 meta-analysis, based on 150,000+ studies. Table 1 presents the overall findings and it can be vividly noted that retention is overwhelmingly disastrous, among educational interventions at enhancing academic achievement (see Hattie, 1989, 1990). The effects of retention, based on 861 studies was $-.15$ -- that is there is a decline in achievement of $.15$ standard deviations on achievement tests when a child is retained back/

Table 1

Summary of relationships to achievement (from Hattie, 1990).

	<i>No. of studies</i>	<i>effect-size</i>
School	3313	.25
Physical attributes	1850	-.05
Finances	658	.12
Aims & Policy	542	.24
Parent involvement	339	.46
Class environment	921	.56
Retention	861	-.15
Social	1124	.39
Mass media	274	-.12
Peer	122	.38
Home	728	.67
Instructor	1097	.44
Style	1075	.42
Inservice Education	3912	.49
Background	22	.60
Instruction	5710	.47
Quantity	80	.84
Quality	22	1.00
Methods	5668	.36
Mathematics	1713	.32
Science	1562	.36
Reading	2333	.50
Others	60	.28

Pupil	3776	.47
Affective	355	.24
Disposition to learn	93	.61
Cognitive	896	1.04
Methods of instruction	6352	.29
Team teaching	41	.06
Individualization	630	.14
Audio-visual aids	6060	.16
Programmed instruction	220	.18
Ability grouping	3385	.18
Learning hierarchies	24	.19
Calculators	231	.24
Instructional media	4421	.30
Testing	1817	.30
Computer-assisted instruction	566	.31
Simulation & games	111	.34
Questioning	134	.41
Homework	110	.43
Tutoring	125	.50
Mastery learning	104	.50
Bilingual programs	285	.51
Goals	2703	.52
Acceleration	162	.72
Direct instruction	253	.82
Learning strategies	783	.61
Behavioral objectives	111	.12
Advance organizers	387	.37

Remediation/feedback	146	.65
Reinforcement	139	1.13
Grand total or mean	165258	.40

The effects of retention on academic and personal outcomes are systematically negative

The negative effects are pervasive over most academic and personal educational outcomes (Table 2). Those who continue to retain pupils at grade level do so despite cumulative research evidence showing that the potential for negative effects consistently outweighs positive outcomes.

Table 2

Effect-sizes for various academic and personal outcomes as a consequence of retention

			Effect-size weighted <u>by effect</u>	Effect-size weighted <u>by study</u>
	<u># of ES's</u>	<u># of Studies</u>		
Overall effect-size	861	63	-.15	-.26
Academic achievement	536	47	-.19	-.31
Language Arts	106	18	-.16	-.33
Reading	144	34	-.08	-.30
Mathematics	137	31	-.11	-.25

Personal adjustment	234	27	-.09	-.21
Social	101	27	-.09	-.21
Emotional	33	10	.03	-.12
Behavioral	24	10	-.13	-.23
Self-concept	45	11	-.13	.06
Attitude toward school	39	10	-.05	-.18
Attendance	7	5	-.18	-.22
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The negative effects of retention increase over time.

When a mean effect-size was calculated for those measurements taken one year after retention on same-age children, a value of -.45 was obtained. After one year the retained groups were scoring .45 standard deviation unit lower than the comparison groups who had gone on to the next grade and in many cases were being tested on more advanced material. Each subsequent year this difference became larger with the difference reaching .83 standard deviation unit for measures taken four or more years after the time of retention.

Also note (from Holmes, 1989):

- Of the few positive findings, "it appears that all of these (positive) studies were conducted in settings described as suburban and included few if any black subjects".
- When only well matched studies were examined, a greater negative effect was found for retention than in the research literature as a whole.

Findings from other retention studies are similarly negative.

- Retention is not helpful at all grades, including kindergarten
- Studies showing positive effects are few and the initial positive effects tend to diminish over time.
- Most schools do not provide special interventions for retainees; therefore, the likelihood of positive outcomes following retention is further diminished. Students are retained in programs that were not beneficial to them in the first year.
- Members of decision-making teams may use data selectively and recommendations to retain or promote may be subject to bias.
- Being retained one year almost doubled a student's likelihood of dropping out, while failing twice almost guaranteed it. In fact, retention is the second greatest predictor of school drop-out.
- There is a consistently negative picture of the association between retention and race, gender, SES, and school outcomes.
- Retention peaks the beginning of a level of education (Grade 1, entering middle school, and entering High school)

Table 3

Examples of findings from various retention studies

Mantzicopoulos & Morrison (1992): Thus, it can be reasonably claimed that kindergarten retention was not helpful in children in the short interval of this study. Despite the observed reduction in attention problems among retained children, no improvement in academic skills was noted" (p. 196)

Tomchin & Impara (1992): Studies showing positive effects are few and the initial positive effects tend to diminish over time. In addition, most schools do not provide special interventions for retainees; therefore, the likelihood of positive outcomes following retention is further diminished" (p. 200)

Shepard & Smith (1989): Long-term follow-up studies, especially found no difference in achievement between transition-eligible and transition participants even though transition children had sometimes shown an initial advantage. .. On teacher ratings of reading and math achievement there were no differences between the groups... The extra year had produced no benefit for retained children over controls on teacher ratings of social maturity, learner self-concept, or attention at the end of first grade.

Brynes (1989): The research indicates that the threat of non-promotion is not a motivating force

for students; grade retention does not generally improve achievement or adjustment for developmentally immature students; economically, grade retention is a poor use of the education dollar, because it increases the cost of education (the retained child spends an additional year in the public school system) without any benefits for the vast majority of retained children; characteristics such as low socioeconomic status and peer classroom conduct affect the likelihood that a child will be retained.

Peterson, DeGracie & Ayabe (1987): "One of the reasons typically offered as an explanation for the failure of retention to improve academic achievement is that students are retained in programs that were not beneficial to them in the first year" (p. 108). "Overall, then, our results seem to indicate that retention does not have a favorable long-term impact on academic achievement of primary students as measured by relative class standing in the same year. This is especially true considering that promoted students scored nearly as well as retained students by the third year after retention, but they were taking a test that was one grade level higher than the retained students and thus were answering questions concerning more advanced material" (p. 116).

Grant (1987): Results suggest that members of decision-making teams may use data selectively and that recommendations to retain or promote may be subject to bias.

Kaczala (1991). In the Cleveland Pubic School system, school retention has negative effects on student achievement when the following variables relating to school characteristics are examined: (1) enrollment; (2) attendance; (3) drop out rates; (4) stability rates (percent of students who stay in the same school for the entire year); (5) suspensions; (6) percent of male students; (7) percent of black students; and (8) reading comprehension.

Texas Central Education Agency (1995): "... the effects of grade level retention consistently shown that having a student repeat a grade or delaying entry to kindergarten or first grade when the child is of the appropriate chronological age does not help students academically or personally.

Shepard (1989): Kindergarten retention and transition rooms are ineffective. Although a year older than their new grade peers, transition children perform no better academically than transition-eligible children who went directly on to the first grade. The finding of no difference or no benefit is true whether children were placed on the basis of pre-academic problems or developmental immaturity. Children who spend an extra year before first grade are just as likely to end up at the bottom of their first or third grade class as unready children who refused the special placement.

Foster (1993): Perhaps one of the most frightening and costly effects of retention is the increased risk of dropping out of school. Although one of its goals is to provide children the opportunity to be more successful, and therefore stay in school longer, retention clearly has the opposite effect... Being retained one year almost doubled a student's likelihood of dropping out, while failing

twice almost guaranteed it. In fact, retention is the second greatest predictor of school drop-out.

Grissom & Shepard (1989):Analyses that adjust for achievement and various background variables suggest that there may indeed be a causal connection between retention and dropping out.

Meisels & Liaw (1993): They used the NELS data based on 24,599 eight-graders enrolled in 1052 schools throughout the USA. NELS is the most comprehensive longitudinal study of student outcomes ever mounted by the US government. Overall, minority students were retained in significantly higher proportions than Whites were: 29.9% of the Black students, and 25.2% of the Hispanic students repeated a grade at least once, as contrasted with only 17.2% of the White students. Four times as many of the retainees were from the lowest SES group as compared with the highest. In general, students who were retained showed a disadvantage on later school performance outcomes or behavioral variables when eight-grade outcomes of those who had been retained were compared with those who had never been retained. ... These findings paint a consistently negative picture of the association between retention and race, gender, SES, and school outcomes.

Cosden, Zimmer & Tuss (1993): Our study suggests that retention policies may have a great impact on some groups of students than others. If younger students, and students with less preparation for formal schooling, are more likely to be retained, then minority students, particularly those from lower socioeconomic backgrounds, may be more vulnerable to this intervention.

Dauber, Alexander & Entwisle (1993): Race differences are not significant once the effect of SES is controlled, suggesting that much of the race difference in retention rates may be due to the higher percentage of African-American children who come from impoverished homes.

Morris (1993): There is no reason to expect that the retention rates in North Carolina are any different from those in other states (see Morris, 1993). "The retention rate starts very high in the first grade ad drops rapidly to the very lowest rank by the fifth or sixth grade. The rates for Grades 3 through 6 were the lowest in magnitude in both years" (p. 501). Perhaps the "most striking aspect of the retention rate pattern across grades is the peaks, which I have argued are most likely to occur at the beginning of a level of education". Assuming ability is normally distributed and a challenging curriculum will cause some students difficulty -- hence a "strict retention" policy will seek out those students and retain them as early as possible. Further, formerly retained students, soon failing again, are retained as soon as they are re-eligible, in the first year of the next level, resulting in an abrupt increase or peak, in the rate. (p. 507).

It is rare in educational research to find so many studies with a similar conclusion: retention is not a successful intervention to assist students either academically or personally. Some overall conclusions follow:

Table 4

Conclusions from the retention literature

National Academy of Education (1991): "Research conducted in recent years on grade retention has led educators to make the connection that holding young people back in schools holds them back in life" (p. 53).

House (1989): Students are retained in rather arbitrary and inconsistent ways, and those flunked are more likely to be poor, males and minorities, although holding students back is practiced to some degree in rich and poor schools alike. The effects of flunking are immediately traumatic to the children and the retained children do worse academically in the future, with many of them dropping out of school altogether. Incredibly, being retained has as much to do with children dropping out as does their academic achievement. It would be difficult to find another educational practice on which the evidence is so unequivocally negative.

Stephen (1992): Retention consequences are devastating and pervasive.

Texas Education Agency, Austin (1993): "Retention in grade does not help most students, and that retention is an expensive and ineffective attempt to solve the challenges presented by students who require alternative instructional strategies and support systems to be successful in school".

Foster (1993): Recent literature in the field, however, presents conclusive evidence against retaining children. ... A large number of other meta-analyses and synthesis of retention studies

confirm the notion that children recommended for retention, but promoted anyway, do at least as well or better than similar children who re retained in order to improve their academic skills. ... If the goal of retention is to enhance academic achievement, implementation fails to realize this goal" (p. 39).